

# AMENDMENTS TO THE CLAIMS

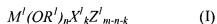
Please amend claims 1 and 24 as follows:

Claim 1 (Currently Amended) A gas barrier layered product comprising a base material and a layer stacked on at least one surface of the base material, wherein the layer is formed of a composition comprising:

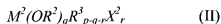
a hydrolyzed and condensed product of at least one compound (L) comprising a metal atom to which at least one characteristic group selected from a halogen atom and an alkoxy group has been bonded; and

a neutralized product of a polymer comprising at least one functional group selected from a carboxyl group and a carboxylic anhydride group, wherein ~~at least 55-98~~ mol% of a  $\text{-COO-}$  group contained in the at least one functional group has been neutralized with a metal ion having a valence of two or more,

wherein the compound (L) comprises at least one compound (A) represented by the following chemical formula (I) and at least one compound (B) represented by the following chemical formula (II):



wherein  $M^I$  is Si;  $R^I$  is an alkyl group;  $X^I$  is a halogen atom;  $Z^I$  is an alkyl group substituted by a functional group having reactivity to a carboxyl group;  $m$  is equal to a valence of  $M^I$ ;  $n$  is an integer of 0 to  $(m-1)$ ;  $k$  is an integer of 0 to  $(m-1)$ ; and  $1 \leq n + k \leq (m-1)$ ,



wherein  $M^2$  is Si, Al or Ti;  $R^2$  is an alkyl group;  $R^3$  is an alkyl group, an aralkyl group, an aryl group, or an alkenyl group;  $X^2$  is a halogen atom;  $p$  is equal to a valence of  $M^2$ ;  $q$  is an integer of 0 to  $p$ ;  $r$  is an integer of 0 to  $p$ ; and  $1 \leq q + r \leq p$ , and

wherein a mole ratio of the compound (A) / the compound (B) is in a range of 0.5 / 99.5 to 40 / 60.

Claim 2 (Cancelled).

Claim 3 (Original) The gas barrier layered product according to claim 1, wherein 0.1 to 10 mol% of the  $\text{-COO-}$  group contained in the at least one functional group has been neutralized with a univalent ion.

Claim 4 (Cancelled).

Claim 5 (Previously Presented) The gas barrier layered product according to claim 1, wherein in the chemical formula (I), the functional group having reactivity to a carboxyl group is at least one selected from the group consisting of an epoxy group, an amino group, and an isocyanate group.

Claims 6-10 (Cancelled).

Claim 11 (Previously Presented) The gas barrier layered product according to claim 1, wherein the gas barrier layered product has an oxygen transmission rate of  $1.0 \text{ cm}^3/\text{m}^2 \cdot \text{day} \cdot \text{atm}$  or lower in an atmosphere of  $20^\circ\text{C}$  and 85% RH.

Claim 12 (Previously Presented) The gas barrier layered product according to claim 1, wherein the gas barrier layered product has a haze value of 3% or lower.

Claims 13 and 14 (Cancelled).

Claim 15 (Original) The gas barrier layered product according to claim 1, wherein the content of an inorganic component contained in the composition is 5 to 50 wt%.

Claim 16 (Original) The gas barrier layered product according to claim 1, wherein the polymer is at least one polymer selected from polyacrylic acid and polymethacrylic acid.

Claim 17 (Original) The gas barrier layered product according to claim 1, wherein the metal ion is at least one selected from the group consisting of a calcium ion, a magnesium ion, a barium ion, and a zinc ion.

Claim 18 (Original) The gas barrier layered product according to claim 1, wherein the composition further comprises polyalcohols.

Claim 19 (Original) The gas barrier layered product according to claim 18, wherein a weight ratio of the neutralized product / the polyalcohols is 10 / 90 to 99.5 / 0.5.

Claim 20 (Original) The gas barrier layered product according to claim 1, further comprising an adhesive layer disposed between the base material and the layer.

Claim 21 (Original) The gas barrier layered product according to claim 1, wherein the base material comprises a paper layer.

Claim 22 (Original) A packaging medium comprising a gas barrier layered product according to claim 1.

Claim 23 (Original) The packaging medium according to claim 22, wherein a base material included in the gas barrier layered product comprises a paper layer.

Claim 24 (Currently Amended) A method for producing a gas barrier layered product, comprising:

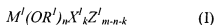
a first process of forming, on a base material, a layer composed of a composition comprising:

a hydrolyzed and condensed product of at least one compound (L) comprising a metal atom to which at least one characteristic group selected from a halogen atom and an alkoxy group has been bonded; and

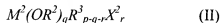
a polymer comprising at least one functional group selected from a carboxyl group and a carboxylic anhydride group; and

a second process of bringing the layer into contact with a solution comprising a metal ion with a valence of two or more, wherein at least 55-98 mol% of a -COO- group contained in the at least one functional group is neutralized with the metal ion having a valence of two or more,

wherein the compound (L) comprises at least one compound (A) represented by the following chemical formula (I) and at least one compound (B) represented by the following chemical formula (II):



wherein  $M^l$  is Si;  $R^l$  is an alkyl group;  $X^l$  is a halogen atom;  $Z^l$  is an alkyl group substituted by a functional group having reactivity to a carboxyl group;  $m$  is equal to a valence of  $M^l$ ;  $n$  is an integer of 0 to  $(m-1)$ ;  $k$  is an integer of 0 to  $(m-1)$ ; and  $1 \leq n + k \leq (m-1)$ ,



wherein  $M^2$  is Si, Al or Ti;  $R^2$  is an alkyl group;  $R^3$  is an alkyl group, an aralkyl group, an aryl group, or an alkenyl group;  $X^2$  is a halogen atom;  $p$  is equal to a valence of  $M^2$ ;  $q$  is an integer of 0 to  $p$ ;  $r$  is an integer of 0 to  $p$ ; and  $1 \leq q + r \leq p$ , and

wherein a mole ratio of the compound (A) / the compound (B) is in a range of 0.5 / 99.5 to 40 / 60.

Claims 25 and 26 (Cancelled).

Claim 27 (Previously Presented) The production method according to claim 24, further comprising:

a process of preparing a solution (S) comprising the polymer and at least one compound comprising a metallic element selected from the group consisting of the compound (L), a partial hydrolysate of the compound (L), a total hydrolysate of the compound (L), a partial hydrolyzed and condensed product of the compound (L), and a product obtained through condensation of a part of a total hydrolysate of the compound (L); and

a process of forming the layer by applying the solution (S) to the base material and then drying it.

Claim 28 (Previously Presented) The production method according to claim 24, wherein the first process comprises:

a process of forming the hydrolyzed and condensed product of the compound (L);

a process of preparing a solution (S) comprising the polymer and the hydrolyzed and condensed product of the compound (L); and

a process of forming the layer by applying the solution (S) to the base material and then drying it.

Claim 29 (Original) The production method according to claim 24, wherein in the polymer contained in the solution (S), 0.1 to 10 mol% of a  $\text{-COO-}$  group contained in the at least one functional group has been neutralized with a univalent ion.

Claim 30 (Original) The production method according to claim 24, further comprising a process of heat-treating the layer at a temperature of 120 to 240°C, after the first process and before and/or after the second process.

Claim 31 (Previously Presented) The production method according to claim 24, wherein a mole ratio of the compound (A) / the compound (B) is in a range of 3 / 97 to 40 / 60.

Claim 32 (Previously Presented) The gas barrier layered product according to claim 1, wherein a mole ratio of the compound (A) / the compound (B) is in a range of 3 / 97 to 40 / 60.

Claim 33 (Previously Presented) The gas barrier layered product according to claim 1, wherein the layer has a sea-island structure containing a sea phase (P) and an island phase (Q).

Claim 34 (Previously Presented) The gas barrier layered product according to claim 33, wherein

the sea phase (P) has a sea-island structure composed of: a sea phase (P1) predominantly comprising the neutralized product of the polymer; and an island phase (P2) predominantly comprising the hydrolyzed and condensed product of the compound (L), and

the island phase (Q) has a sea-island structure composed of: a sea phase (Q1) predominantly comprising the neutralized product of the polymer; and an island phase (Q2) predominantly comprising the hydrolyzed and condensed product of the compound (L).